A Controlled Study of the Effect of Television Messages on Safety Belt Use

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A study shows that television campaigns do not have any effect on use of safety belts, thus supporting the argument that approaches directed toward changing behavior are inefficient and often ineffective means of reducing highway losses.

Introduction

The use of safety belts in automobiles greatly reduces the probability of death and injury in crashes. ¹⁻⁴ As a result of legislation in several states, lap belts have been standard equipment in at least the front outboard seating positions of 1964 and later models of American made cars. ⁵ Authorized by the National Traffic and Motor Vehicle Safety Act of 1966, the Secretary of Transportation issued a federal motor vehicle standard, effective January 1, 1968, which requires lap and upper torso belts in front outboard seating positions except in convertibles and lap belts in all other seating positions except for folding auxiliary jump seats, side-facing seats, and rear-facing seats of automobiles manufactured for sale in the United States. ⁶

However, the availability of safety belts does not guarantee their use. In October, 1970, a study was conducted which included actual observation of drivers in

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their automobiles. In a metropolitan area, only 7 per cent of drivers of 1968 and later models were using lap and upper torso belts and an additional 16 per cent were using lap belts only. Lap and upper torso belts were used by 1 per cent of drivers of 1968 and later models in smaller cities and 9 per cent of such drivers used lap belts only. Belts, even when present, were used less often in earlier models. In spite of a number of campaigns urging safety belt use, the proportion of vehicle occupants using them is so low that much of the reduction in death and injury that should be achieved by their use is not being realized.

Campaigns promoting the use of safety belts have been based on inadequate knowledge of the factors contributing to lack of use. Slogans such as "buckle up for safety," "lock it to me," "what's your excuse," and the like have been the hallmarks of these campaigns. If the campaigns have been evaluated at all in terms of effectiveness, the evaluations have been faulty in design and execution. 8,9 Even with public service time and space contributed by television, radio, and newspapers, the cost of these campaigns has usually been high and the results are inconclusive.

Previous Research

Although methodologically inadequate, previous studies of the effects of mass media efforts on safety belt use are not encouraging. A 1968 campaign by the National Safety Council used the equivalent of \$51,509,034 in public service time and space in various media. Self-claimed use of safety belts, obtained by interviewing a national sample of 2,500 adults before and after the campaign, revealed no change in claimed usage. However, public service time is often the least desirable time in radio and television. Also, claimed use of safety belts has been shown to be an invalid measure of actual use.

A 1969 campaign in Toronto used radio, television, newspapers, posters, and group sessions in business firms, secondary schools, and police departments. Although the audience reached could not be adequately estimated, there was widespread use of the materials by the mass media. The use of safety belts in "collision-involved vehicles" during the campaign did not change significantly from the precampaign trend.¹² However, since safety belt use reduces the frequency and severity of a wide range of injuries, it is at least theoretically possible for the relative percentage of reported collision-involved vehicles in which belts are used to remain unchanged or decrease even though the absolute frequencies of occurrence of such injuries have actually decreased.¹³ Consequently, the use of percentages of belt use among reported collisions is an inadequate indicator.

In a 1971 study, Fleischer¹⁴ selected a number of radio and television safety belt messages from among those produced in recent years by the National Safety Council, the American Safety Belt Council, and the U.S. Department of Transportation. When these messages were exposed to expert and lay panels, there was wide disagreement over which messages the panel members thought would be effective. The experts emphasized entertainment value and avoidance of the "scare approach" while the lay panel rated highly those messages with "scare content."

Subsequently, three communities were studied by Fleischer with respect to safety belt use during a radio and television campaign using materials selected according to the panel ratings. A mix of those messages rated highly by experts and laymen was employed. Similar in demographic characteristics, the three communities were given intensive exposure, moderate exposure, and no exposure, respectively, in a 5-week campaign on local radio and television. Observed safety belt use increased slightly in the intensive and no exposure communities but not in the one receiving moderate exposure. Postcampaign use was about the same as precampaign use in all three communities.

These paradoxical results may be a result of insufficient control of observers rather than differences in safety belt use. The observers in Fleischer's study were allowed to choose or change observation sites at their convenience, e.g., to avoid having the sun in their eyes. We have found that safety belt use rates can vary among sites in the same community by an order of magnitude larger than that found between communities in the Fleischer study.

Overview of the Present Study

In the present work, we have avoided some of the problems of previous studies and have tried to design and implement as definitive a study as present knowledge and technology allow. First, a survey was conducted of actually observed safety belt users and nonusers to determine the factors which distinguished the two groups. 7 Second, television messages based partially on the preliminary study were developed and produced. These messages were then shown on one cable of a dual cable television system designed for marketing studies. The second cable as well as noncable groups allow comparison with groups not exposed to the messages to determine the effect of the messages relative to the effect of other factors which may influence belt use. The messages were shown for 9 consecutive months. For 1 month before and throughout the campaign, drivers were observed as to safety belt use and were matched through license plate numbers to the households on a given cable. In addition to being controlled, the study was "double blind," that is, the television viewers did not know that they were being studied and the observers did not know the purpose of the study or that the persons being observed were in experimental or control groups.

The Television Messages

The preliminary survey consisted of interviews with actually observed safety belt users and a random sample of nonusers observed at the same sites and times. The higher the respondent's education, the greater the likelihood that he was observed wearing safety belts. Those who rated safety belts as relatively more comfortable and convenient, those who said that they did not smoke while driving, and those who had a friend or relative injured, but not killed, in an automobile crash were also more likely to use belts. Furthermore, these factors were additive, that is, the presence of each factor increased the probability of use independent of the other factors.

The finding that a friend's injury, but not death, increased the probability of use indicates the likelihood that fear of being disfigured or disabled is more conscious and motivational in the use of safety belts than fear of death in a crash. Thus, we decided to emphasize the efficacy of safety belts in decreasing the probability of disfigurement and disability.

We were more wary of the comfort and convenience factor. Realizing that the safety belts in many automobiles are uncomfortable and inconvenient because of poor design, we did not want to reinforce the tendency not to use belts because of this factor. Smoking while driving and education probably reflect a number of differences in personal characteristics such as risk-taking behavior and self-esteem. Since we do not believe that these characteristics are readily manipulable by television messages, these factors were not considered in the creation of the messages. Techniques which are said in the industry to be successful in product marketing—for example, physician

endorsement and a family responsibility theme—were employed in addition to the disfigurement-disability theme.

The television messages were written and produced in collaboration with an advertising agency which had a record of success in advertising commercial products as well as experience with public service material. The preliminary study and some ideas for messages were shared with the writers from the agency. These writers then outlined many messages, some of which were selected and modified in subsequent discussions. Six basic messages were eventually developed and filmed. The following are brief descriptions of these messages:

- 1. A father (Figure 1) is shown lifting his teenaged son from a wheelchair into a car. As they ride along, safety belts obviously fastened, the father's thoughts are voiced off-camera intermixed with the son's on-camera expressions of excitement at going to a football game. The father expresses guilt for not having encouraged his son to use safety belts before the crash in which he was injured. The analogy to the protection that the son wore when he played football is drawn.
- 2. A teenaged girl (Figure 2) is shown sitting in a rocking chair looking out a window. She says, "I'm not sick or anything. I could go out more but since the car crash, I just don't.... The crash wasn't Dad's fault. I go for walks with my father after dark... that way I don't get, you know, stared at," She turns enough to reveal a large scar on what was the hidden side of her face. She continues, "It doesn't hurt anymore." An announcer says off-camera, "Car crashes kill two ways: right away and little by little. Wear your safety belts and live!"
- 3. A woman whose face cannot be seen (Figure 3) is shown in front of a mirror applying makeup. A full face picture on her dressing table shows her as a beautiful woman. Her husband enters the scene and suggests that they go to a party. She asks him not to look at her without makeup as she turns to reveal a scarred face. An off-camera announcer describes a crash in which the wife was driving slowly and carefully. The announcer continues, as the picture on the table is shown, "Terry would still look like this if she had been wearing safety belts." Safety belts are shown through a shattered windshield. Announcer: "It's much easier to wear safety belts than to hear your husband say..." Husband: "Honey, I love you anyway."
- 4. A father and mother (Figure 4) are shown riding in the front seat of a car, their 8-year-old daughter seated between them. The father must brake hard to avoid another car entering from a side road. The daughter bumps her head as she is thrown into the dashboard and begins to cry. A policeman walks up to the car and the father angrily says: "Did you see what that guy just did? That jerk. I had to jam on my brakes. My little girl hit her head." The policeman asks the father why the child wasn't wearing safety belts. Over the father's protestations about the other driver, the policeman emphasizes the father's responsibility to protect his child. The scene closes with the policeman walking away saying: "When are people gonna learn?" and the announcer following with: "It doesn't take brains to wear safety belts. But it sure is stupid not to."

5. Two physicians and a nurse (Figure 5) are shown ordering coffee. The nurse asks: "Trouble?" A doctor replies: "Another guy driving home not wearing his safety belts." Nurse: "Gonna live?" Doctor: "Guess you could call it living." Nurse: "You've had a lot of car crash cases lately." Doctor: "Yeah, and I'm getting sick of it. They've got safety belts in the cars. Why... why in the name of







FIGURE 1 Father and son advertising message.

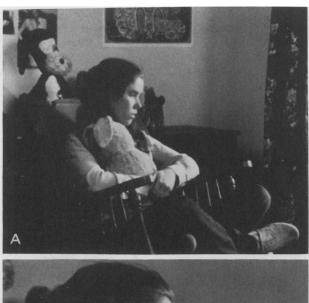






FIGURE 2 Girl at the window advertising message.

God don't they put 'em on?" Waitress: "Do safety belts really make a difference?" The doctor shows her how a thermometer case can be hit and the thermometer inside not broken, but it shatters when hit out of the case. The waitress expresses further doubt and the doctor says: "How many times do you have to tell 'em?"

6. A car is shown in a driveway (Figure 6). From a puff

of smoke steps a witch who announces: "Ha, ha, ha. I'm the Wicked Car Witch. Your Mommy and Daddy cannot see me but I make them drive without their safety belts. That's how they get hurt in car crashes." The mother gets into the car and the witch hides some belts in the seat and tangles others. A Good Car Fairy appears and says: "Children! I am



FIGURE 3 Woman at the mirror advertising message.

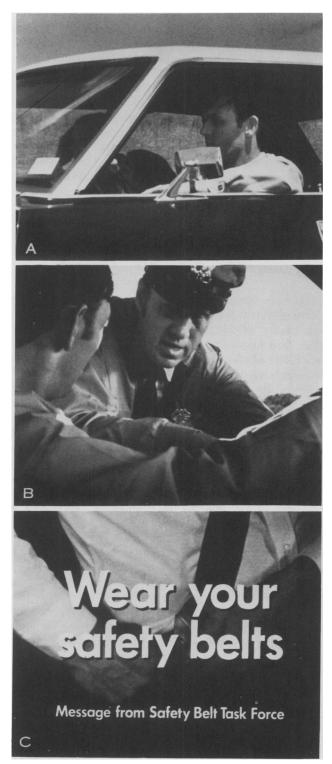


FIGURE 4 Family and policeman advertising message.

the Good Car Fairy. When your Mommy and Daddy get in the car, say 'Mommy! Daddy! If you love me, wear your safety belts!' "The Wicked Witch and the Good Fairy argue as the father enters the car. A little girl calls from the porch: "Mommy! Daddy! Wear your safety belts." The parents fasten the belts, the Wicked Witch disappears in a

puff of smoke, and the Good Fairy again admonishes the children to urge their parents to demonstrate their love by wearing their safety belts.

By industry standards, the messages were of high quality. The "father and son" was judged the best among 30 entries in the public service category of the TV-Radio Advertisers Club of Philadelphia. The "teenaged girl at the



FIGURE 5 Physicians and nurse advertising message.

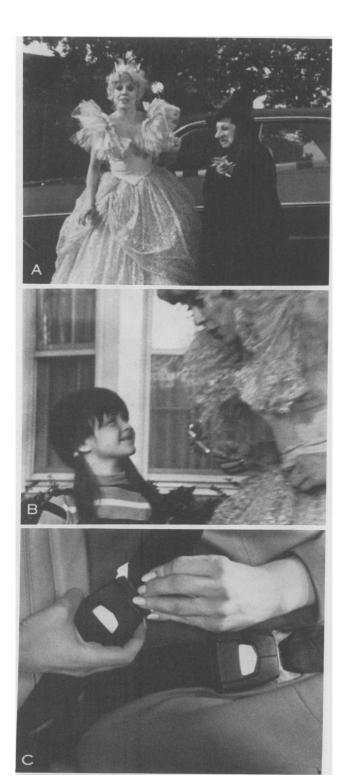


FIGURE 6 Witch and fairy: children's advertising message.

window" was among the 10 finalists of 400 entries in the public service category of the Advertising Club of New York. It was also chosen as a finalist among the public service entries in the American TV and Radio Commercials Festival and National Print Advertising Competition. An informal opinion was obtained from the Director of the National Association of Broadcasters Code Authority that

the messages were in compliance with the code.

The messages were not shown indiscriminately. Each was placed on or adjacent to a program likely to have an audience to whom the message would most likely appeal. For example, the witch was shown on network children's programs, the father and son on National Football League games, and the scarred faces on popular "soap operas." No attempt was made to control what was shown in addition to our messages. For example, a number of automobile manufacturers had "tag lines" urging safety belt use at the end of their commercials throughout the study period. Of course, these additional messages were shown to both experimental and control groups and were thus constant for both audiences.

Study Design

The messages were shown on one cable of a dual cable television system designed for marketing studies. ¹⁵ Located in a county of 230,000 people (1970 census), the two cables feed television signals to 13,800 households. There were 6,400 of these households on Cable A, on which our messages were shown, and 7,400 on Cable B, which was, in this case, the control cable. Each cable contains the full range of channels available from local stations as well as special movie and weather channels.

The two cables are distributed in a checkerboard fashion among blocks of homes in the community that have chosen to pay for the improved signal which the cable provides. Although the assignment of households to one or another cable was not strictly random, the various marketing studies done in the community have found no significant differences between the two in demographic characteristics, ownership of automobiles and other consumer goods, and pretest purchasing behavior for a large number of products. ¹⁶

In all, 14 observation sites were chosen. Using maps of the cable distribution among the streets and traffic flow maps obtained from the local traffic engineer, we chose observation sites at points which maximized the likelihood of observing automobiles from the neighborhoods where the cables were installed. Observers were assigned to a particular site for a given number of hours on a given day. No deviation from the observation sites was allowed. From May 10 through October 15, the observers were rotated among the sites daily. Observation periods were 7 a.m. to 10 a.m., 10 a.m. to 1 p.m., 1 p.m. to 4 p.m., and 4 p.m. to 7 p.m. Because of shortened daylight, the periods were changed to 8 a.m. to 12:30 p.m. and 12:30 p.m. to 5 p.m. after October 15. Half of the sites allowed observation of cars going into the center of the city and were observed during morning hours. The remaining sites, situated so as to observe drivers leaving the center of the city, were observed during afternoon hours. A morning and an afternoon site each was observed each weekday in the May to October 15 period. Observations were also obtained on Saturdays and Sundays but on a separate rotation among the sites. After October 15, only one site per day was observed, alternating morning and afternoon sites every other weekday. Thus, 14 weekdays were required to observe all of the sites in each time period in a given rotation during both summer and winter months. The sites remained constant and the observers were rotated among them in the same order throughout the study.

The observers were hardly noticed by persons being observed. The occasional motorist or pedestrian who stopped and asked, "What are you doing?" was satisfied with the answer "Taking a traffic survey."

Observing the driver only, observers stood at designated sites on the opposite side from the driver of an approaching automobile. The driver's sex, racial appearance, and approximate age were tape recorded as the vehicle approached the observer. The driver's use or nonuse of lap and lap-and-shoulder belts was observed as the automobile passed the observer. The automobile license number was then obtained as the automobile moved away.

The license plate numbers were matched with owner's names and addresses using the files of the state department of motor vehicles. The names and addresses were then matched to the file specifying which cable was assigned to given households. In those cases where the household was not on a cable, the household was specified as to whether or not it was in the same county as the cable groups.

Thus, there are four groups for comparison: Cable A households where the messages were shown, Cable B households which constitute a control group, noncable households in the same county as the cable households, and out-of-county households.

The messages were shown for 9 months on Cable A exclusively. Table 1 presents the distribution of the messages by time of day over the 9-month period, June 7, 1971, through March 5, 1972. For the first few months, the messages were shown mainly in daytime hours. In the late fall and winter, more "prime" evening time became available through the courtesy of insurance companies and other advertisers who were willing to have public service advertising in lieu of their scheduled commercials on Cable A. These arrangements were made with the parent

companies so that local affiliates of the companies were unaware of the experiment. The local television station managers were aware of the campaign, as they are of all tests on the experimental cable system. Since their stations receive extra income for some of the tests, it is in their interest not to reveal the experimental nature of the cable system to the population in the city. Special arrangements were made with the station managers to forward complaints to us—which were anticipated because of the strong themes—but none occurred.

There were fewer exposures in the later months because a greater number of people can be reached by fewer exposures in prime time. We estimate on the basis of ratings of the audience of the programs on which the messages were shown that the average television viewer saw one or another of the messages two to three times per week. Of course, high frequency viewers saw the messages more often and low frequency viewers saw them less often than the average. In total, the campaign was equivalent to the type of major advertising effort which companies use to promote a new product. If this campaign had been sponsored on a national basis, it would have cost approximately \$7,000,000.

Results

The campaign had no measured effect whatsoever on safety belt use. Table 2 shows the percentage of observed male drivers using lap or lap-and-shoulder belts for each of the time periods necessary to observe drivers at all of the designated sites. Only 1964 and later cars are included in the cable and other in-county groups. The number of observations on which the percentage is based is shown beside each percentage.

There is no significant difference between drivers from households on the experimental cable and drivers from households on the control cable in any of the observation periods. Also, there is no difference in use between those on the cables and other drivers observed at the same sites

TABLE 1—Number of Safety	Belt Messages Shown b	y Month and Time of Day
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	1971								1972			
Times	June	July	August	September	October	November	December	January	February	Total		
Sign-on-noon							·		5-1			
No.	30	31	40	53	32	32	12	14	33	277		
%	21*	28	29	48	30	33	17	19	34			
12:01-6:00 p.m.												
No.	105	68	78	43	50	25	26	41	43	479		
%	73	62	57	39	48	26	38	55	45			
6:01 p.msignoff												
No.	8	11	19	15	23	40	31	20	20	187		
%	6	_10	14	<u>13</u>	_22	<u>41</u>	45	27				
Total	143	110	137	111	105	97	69	75	<u>21</u> 96	943		

^{*} Percentages are based on the total number of messages in a given month.

TABLE 2-Percentage of Male Drivers Using Safety Belts in Experimental, Control, and Nonstudy Groups

Dates	Experimental Cable A		Control Cable B		No Cable, Same County		No Cable, Out of County	
	% use	No. observed	% use	No. observed	% use	No. observed	% use	No. observed
Preexperimental	15	461	16	552	14	4343	14	1672
5/28-6/16	14	372	14	46 9	13	3840	12	1521
6/17-7/6	13	338	15	511	14	3706	9	1551
7/7-7/26	8	370	11	456	11	3825	9	1764
7/27-8/13	11	332	11	465	11	3785	8	1641
8/16-9/2	12	356	10	442	9	3458	8	1455
9/3-9/22	7	312	9	439	8	3367	7	1861
9/23-10/12	7	343	6	372	7	3322	5	1776
10/13-10/29	13	199	8	287	12	2005	7	1151
11/1-11/16	9	304	10	428	8	3207	8	1725
11/17-11/30*	9	124	10	164	10	1301	9	723
12/13-12/30	5	274	7	278	5	3271	5	1704
12/31-1/18	5	382	4	447	5	4154	4	2091
1/19-2/7	6	355	5	457	4	4497	6	2544
2/8-2/25	5	408	5	564	4	5139	4	2903
2/28-3/16	4	308	4	478	5	4270	4	2889
3/17-3/31	5	297	6	371	5	3474	4	2400

^{*} Some sites missing due to observer illness.

whether from in or out of the county. The same conclusion must be reached when the data for females are viewed in Table 3.

There is a downward drift in safety belt use from the spring through the winter months, more remarkable among male than female drivers. However, this decline occurs in the control and noncable groups as much as in the experimental group. Therefore, it cannot be argued that the messages had a deleterious effect on safety belt use. Some unknown factor or factors contributed to a decreased use of safety belts in the winter months in all of the groups studied. The overall use rates were significantly lower for black persons (3 per cent) than for whites (10 per cent) as found in earlier studies.¹⁷ Age differences were not statistically significant.

Discussion

It must be concluded that the television campaign did not affect the use of safely belts. The decrease in belt use observed during the study occurred in the control and noncable groups as well as the group exposed to the campaign. Although the decrease occurred during the period that the automobile companies' advertising regarding belt use was being shown at the same time, the reduction in use rates cannot be attributed to such advertising. Since it was available to television viewers in all of the groups considered here and there is, therefore, no control group, its possible deleterious effect is unknown. It is clear that safety belt use did not increase during that campaign. The observed reduction in safety belt use in winter could be a result of other factors. For example, belt systems (which are at present in the U.S. usually designed without inertia

reels, long known devices that allow free movement until an impact occurs) are often rated as inconvenient. Having to adjust them to fit over bulky winter clothing could deter some persons from using them in winter.

The failure of these campaigns to increase safety belt use adds evidence to the argument that approaches directed toward changing behavior are inefficient and often ineffective means of reducing highway losses. 18 "Passive" approaches, i.e., those which reduce the frequency or severity of damage to people and property, or both, irrespective of voluntary action on their part, 19 show greater promise toward reducing the deaths and injuries in crashes, as they have historically in closely analogous public health situations. Some passive devices, e.g., energy-absorbing steering columns and windshields that perform like firenets, have been required by federal standards since 1968 and have been shown to produce large reductions in fatalities and injuries. 4,20

Arguments against passive approaches are often based on the reasoning that human behavior produces the losses in energy-damaged people and property and, therefore, human behavior must be changed to prevent them. The fallacy in this argument is the assumption that "causes" must be attacked in order of their contribution to the "effect" to be prevented or ameliorated.²⁰ In illustration, some epidemics are the result of high rates of interpersonal contact which facilitate transmittal of infectious organisms from one person to another. Yet as a group their control has typically been far more successful when based on immunization rather than on attempts to modify the frequency of interpersonal interaction.

Other than the act of driving itself, there is no known behavioral act that is a necessary condition for automibile crashes. In contrast, no injury whatsoever can occur to

either humans or vehicles in automobile crashes unless mechanical energy is transferred in amounts and at rates which exceed the limits the human or vehicle structure can tolerate. A number of strategies are available to control the energy transfer and reduce the losses which occur when energy transfer is not properly controlled.21 These range from preventing vehicles from being placed in motion to emergency medical care and later rehabilitation. Safety belts are one means of energy control, but, as presently designed, they require action on the part of the exposed individual each time he is exposed. It should be obvious that passive approaches are more likely to be successful. However, there seems to be an inherent bias in the U.S. culture against public health strategies which bypass a voluntary individual decision by the person to be protected. The controversy over the fluoridation of drinking water to reduce the incidence of tooth decay should be a sufficient example,22 one that has paralleled earlier controversies such as those related to pasteurization of milk and chlorination of water.

Perhaps because of such a bias, rather than choose the most logical strategy or mix of strategies at the outset, persons reasponsible for implementation of injury control programs frequently try a series of methods from the least to the most obtrusive forms of behavior modification. The most recent attempt at behavior change with respect to safety belt use involves a buzzer and light system which activates if the driver or right front outboard seat occupant has not extended his or her lap belt at least 4 inches from its normally stowed position when the vehicle is in forward gear. This approach was adopted by all manufacturers of automobiles for sale in the United States after January 1. 1972, in response to a federal standard²³ which allows this approach as an option in lieu of an initial requirement for

passive restraints with performance sufficient to protect occupants in forward crashes up to 30 miles per hour. Since the buzzer-light system requires the cooperation of the user and may be deactivated, sometimes permanently, in a number of ways, it is not a passive restraint. Rigorous evaluation of the effect of this device on safety belt use has shown that overall belt use in vehicles equipped with the system is not significantly different from like vehicles not so equipped but observed at the same sites and times.24

Even if the buzzer-light system had been shown to be effective, it will be more than 10 years before most of the present cars not so equipped are off the road. Based on a probability model of vehicle registration in the U.S., we estimate the average registered life of cars in the U.S. as 10.1 years with a standard deviation of 3.8. Therefore. continued scientific search for effective means to persuade people to use the safety belts in their cars is in order. Laws requiring the use of lap-and-shoulder belts when available are in force in all Australian states and are being developed in New Zealand. Preliminary data on actually observed use from Australia indicates that, where safety belts are available, 72 per cent of vehicle occupants are wearing them in metropolitan areas and 60 per cent in rural areas.²⁵ Similar bills have been introduced in a few state legislatures in the U.S. but none have been enacted into law. If these laws are enacted, rigorous evaluation will be necessary to determine their effects in the U.S.

The apparent failure of a number of mass media safety belt campaigns to increase use beyond precampaign levels may not mean that it is impossible to create a campaign which will increase safety belt use. However, the evidence on lack of effect of past efforts is sufficiently strong that the burden of proof of substantial further gains in belt usage resulting from such campaigns is on those who

TABLE 3-Percentage of Female Drivers Using Safety Belts in Experimental, Control, and Nonstudy Groups

Dates		perimental Cable A	Control Cable B		No Cable, Same County		No Cable, Out of County	
	% use	No. observed	% use	No. observed	% use	No. observed	% use	No. observed
Preexperimental	15	273	13	374	17	2760	15	772
5/28-6/16	13	238	16	301	14	2310	6	639
6/17-7/6	12	240	13	276	13	2139	11	685
7/77/26	13	197	11	273	13	2193	11	769
7/27-8/13	13	226	12	277	11	2105	13	753
8/16-9/2	12	187	10	273	11	1933	11	641
9/3-9/22	12	150	13	288	8	1948	10	696
9/23-10/12	10	206	8	259	7	1935	5	724
10/13-10/29	13	118	10	173	12	1136	12	455
11/1-11/16	16	192	14	324	11	2029	10	717
11/17-11/30*	14	74	15	103	14	743	12	227
12/13-12/30	8	196	8	232	7	1933	6	720
12/31-1/18	7	248	8	342	10	2494	9	1088
1/19-2/7	12	259	8	368	8	2731	8	1130
2/8-2/25	7	272	5	354	7	2727	6	1318
2/28-3/16	8	232	7	336	7	2565	7	1333
3/17-3/31	10	170	7	222	7	2006	7	1114

^{*} Some sites missing due to observer illness.

advocate use of mass media to promote use of safety belts.

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CONFERENCE ON EMERGENCY MEDICINE SET FOR JANUARY

The Colorado Chapters of the American College of Emergency Physicians and the Emergency Department Nurses' Association will co-sponsor the first annual "Rocky Mountain Conference on Emergency Medicine" to be held January 19-22, 1975.

The Conference will focus on the problems in emergency medicine as seen in limited rural facilities, as well as large metropolitan departments. Lectures, workshops, and demonstrations will be included in the course structure.

For additional information concerning the Conference, contact: Ellen H. Taliaferro, MD, Director, Ambulatory Care Services, Saint Joseph Hospital, 1835 Franklin St., Denver, CO 80218.